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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,440	07/13/2001	Naoki Watanabe	36992.00081	5821

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EXAMINER

TRAN, NGHI V

ART UNIT PAPER NUMBER

2151

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,440	WATANABE ET AL.	
	Examiner	Art Unit	
	Nghi V. Tran	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on February 23, 2006. Claims 1 and 9 have been amended. Claims 10-19 and 21-23 have been canceled. Therefore, claims 1-9 and 20 are presented for further examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6, 8-9, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wahl et al., U.S. Patent No. 6,324,654 (hereinafter Wahl), in view of Weber, U.S. Patent No. 6,424,993 (hereinafter Weber).

4. With respect to claims 1, 9, and 20, Wahl teaches a method of performing an initial copy procedure in a remote copy system [see abstract and figs.1&5], the method comprising:

- configuring a network path between a first disk subsystem [i.e. primary system] and a second disk subsystem [i.e. secondary system] to increase the

speed of data transmission [i.e. allow network bandwidth to be added to a network connection] across the network path [col.25, lns.1-10; and fig.1];

- after the configuring the network path, configuring the remote copy system for a remote copy operation [figure 1; and see abstract];
- after the configuring the remote copy system, performing an initial remote copy operation to copy data across the network path from the first disk subsystem to the second disk subsystem [column 4, lines 14-33]; and

However, Yanai does not explicitly show adjusting the network path to reduce the speed of data transmission across the network path, thereby reducing the speed of at least one subsequent remote copy operation between the first disk system and the second disk system.

In a related art, Weber suggests or discloses adjusting the network path to reduce the speed of data transmission across the network path, thereby reducing the speed of at least one subsequent remote copy operation between the first disk system and the second disk system [col.1, ln.25 -38].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Wahl in view of Weber by adjusting the network path to reduce the speed of the data transmission across the network path because this feature can reduce operations costs [Weber, col.1, ln.33]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify in order to reduce bandwidth costs [Weber, col.1, ln.37].

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5. With respect to claim 2, Wahl further teaches the first disk subsystem is located in a master site [figure 1].

6. With respect to claim 3, Wahl further teaches the first disk subsystem is located in a manufacturer site [figure 1].

7. With respect to claim 4, Wahl further teaches deploying the second disk subsystem to a remote site [figure 1].

8. With respect to claim 5, Wahl further teaches the configuring the remote copy system comprises: selecting multiple physical paths in the network path to transmit data across the path [column 24, line 44 through column 24, line 10].

9. With respect to claim 6, Wahl further teaches the configuring the remote copy system comprises: increasing a data transfer rate characteristic of the network path [column 3, lines 39-44].

10. With respect to claim 8, Wahl further teaches decreasing the data transfer rate [col.16, lns.17-63 i.e. slow down data transfer].

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11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Wahl and Weber, and further in view of Gallant et al., U.S. Patent Application Publication No. 2002/0067727 (hereinafter Gallant).

12. With respect to claim 7, Wahl does not explicitly show reducing the number of physical paths.

In a related art, Gallant discloses adjusting the network path comprises: reducing the number of physical paths [i.e. SVC] in the network path for transmitting data [paragraphs 0010-0013].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Wahl and Weber, and further in view of Gallant by reducing the number of physical paths because this feature may save capital costs [Gallant, paragraph 0013]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify in order to save capital costs by reducing the amount of bandwidth needed [Gallant, paragraph 0013].

Response to Arguments

13. Applicant's arguments filed February 28, 2006 have been fully considered but they are not persuasive because of the following reasons:

14. Wahl teaches a method of performing an initial copy procedure in a remote copy system [see abstract and figs.1&5], the method comprising: configuring a network path

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between a first disk subsystem [i.e. primary system] and a second disk subsystem [i.e. secondary system] to increase the speed of data transmission [i.e. allow network bandwidth to be added to a network connection] across the network path [col.25, lns.1-10; and fig.1]; after the configuring the network path, configuring the remote copy system for a remote copy operation [figure 1; and see abstract]; after the configuring the remote copy system, performing an initial remote copy operation to copy data across the network path from the first disk subsystem to the second disk subsystem [column 4, lines 14-33]. However, Yanai does not explicitly show adjusting the network path to reduce the speed of data transmission across the network path, thereby reducing the speed of at least one subsequent remote copy operation between the first disk system and the second disk system. In a related art, Weber suggests or discloses adjusting the network path to reduce the speed of data transmission across the network path, thereby reducing the speed of at least one subsequent remote copy operation between the first disk system and the second disk system [col.1, ln.25 -38]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Wahl in view of Weber by adjusting the network path to reduce the speed of the data transmission across the network path because this feature can reduce operations costs [Weber, col.1, ln.33]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify in order to reduce bandwidth costs [Weber, col.1, ln.37].

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15. In response to applicant's argument that Wahl fails to teach or suggest the initial copy procedure. The examiner respectfully does not agree because the examiner interprets "the initial copy procedure" as any other copy procedure. Unless, the applicant is clearly identifying the different between the initial copy procedure and any other copy procedure in the claim's limitation.

16. In response to applicant's argument that the limitation of claims 1, 9, and 20 require the increased transmission speed to be applied only to the initial copy operation (emphasis added). The examiner respectfully does not agree because the limitation, "only to the initial copy," does not commensurate with the scope of the claim.

17. In response to applicant's argument that Wahl and Weber may not be properly combined because the teaching of Weber to reduce bandwidth utilization destroys the teaching of Wahl to increase bandwidth by specifying multiple physical network paths between primary and secondary systems. The examiner respectfully does not agree because the examiner asserts Weber's teaching, as a modification over Wahl's teaching, not destroys the teaching of Wahl.

18. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

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within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

19. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as show in the above.

20. Therefore, the examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims. Claims 2-8 are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, claims 1-9 and 20 are respectfully rejected as shown above.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER

Nghi V Tran
Patent Examiner
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